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- (71) Applicant (for all designated States except US): **GENERAL HOSPITAL CORPORATION** [US/US]; 55 Fruit Street, Boston, MA 02114 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SIMS, Nathaniel**

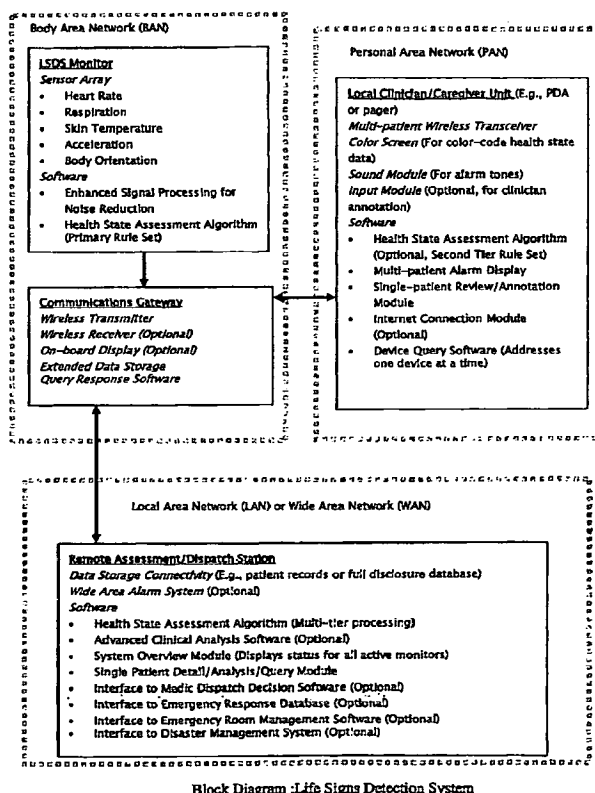
[US/US]; 65 Landsdown Street, Cambridge, MA 02139 (US). **COLQUITT, Nhedti** [US/US]; 7333 SW 184th Place, Aloha, OR 97007 (US). **WOLLOWITZ, Michael** [US/US]; 15 Elm Street, Chatham, NY 12037 (US). **HICKCOX, Matt** [US/US]; 234 Littleton Road, Unit 2D, Westford, MA 01886 (US). **DEMPSEY, Michael** [US/US]; 21 April Lane, Westford, MA 01886 (US).

(74) Agent: **RUBENSTEIN, Allen**; Gottlieb, Rackman & Reisman, P.C., 270 Madison Avenue, 8th Floor, New York, NY 10016 (US).

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(54) Title: **LIFE SIGN DETECTION AND HEALTH STATE ASSESSMENT SYSTEM**



Block Diagram :Life Signs Detection System

(57) Abstract: A wearable platform embodied in a belt or patch provides physiological monitoring of soldiers during field operations or trauma victims at accident sites and makes health state assessments. The platform includes sensors for heart rate, body motion, respiration rate and intensity, and temperature and further contains a microprocessor and short range transmitter. An analog circuit running an algorithm obtains the R-wave period from the EKG signal and produces electrical pulses with the period between pulses corresponding to the R-wave period. A rule based processing engine having an evaluation algorithm is capable of making a medical evaluation of subject condition and determines a confidence level for the evaluation. The rules are subject to variation depending upon the subject population. The information is communicated wirelessly to a local hub for relay to a remote monitor.

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